

Work Order ID 127023

127023

Page 1

Thursday, December 04, 2014 7:46:13 AM

Item ID: D4983-041 Accept *N900040100* Setup Start *NS1*
Revision ID: Stop *NS2*
Item Name: Cargo Hook Assembly
Start Date: 12/4/2014 Start Qty: 1.00 *1* Cust Item ID:
Required Date: 12/4/2014 Req'd Qty: 1.00 *1* Customer:
Reference:

Approvals: Process Plan: ML5 Date: 14-12-04 Tooling: _____ Date: _____ Run Start *NR1*
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4983	REV C

100 0.00
100
Purchasing Memo 0.00
Purchasing ISSUE PO : 26944
TO:RED BARN
C OF C IS REQUIRED

CH 15/01/06 1

110 Receive & Inspect for Damage & Mat'l Certs 0.00
110
Packaging Memo 0.00
Packaging

1x 8013-01-27

120 QC5- Inspect part completeness to step on W/O 0.00
120
QC Memo 0.00
Quality Control

DAS
38
9-89

JAN 30 2015

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td style="width: 25%;">Skid-tube ☐</td> <td style="width: 25%;">Crosstube ☐</td> <td style="width: 25%;">Water Jet ☐</td> <td style="width: 25%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Page 2

Thursday, December 04, 2014 7:46:13 AM

Item ID: D4983-041 Accept *N900040100* Setup Start *NS1*
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 Item Name: Cargo Hook Assembly
 Start Date: 12/4/2014 Start Qty: 1.00 *1* Cust Item ID:
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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>St 459</u>	0.00							
130									
Packaging	Memo	0.00							DAG 66 9-89
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

JAN 02 2015

MLJ 15-02-03

ME

15-2-2

Picklist Print

Page 1

Thursday, December 04, 2014 7:46:17 AM

Work Order ID: 127023

127023

Parent Item: D4983-041

D4983-041

Parent Item Name: Cargo Hook Assembly

Start Date: 12/4/2014

Required Date: 12/4/2014

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 14-03-022 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4983-041P		Purchased		No			Each	0.0000		1			
D4983-041P										**	1X	SP 15-01-27	
Cargo Hook Assembly													

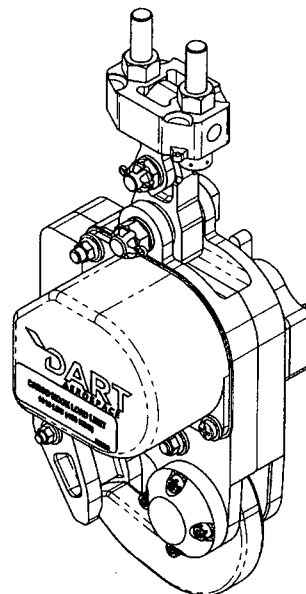
M131371.

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4983-041	CARGO HOOK ASSY
1	1	D4984-041	HOOK SIDE PLATE ASSY
2	1	D4985-041	HOOK SIDE PLATE ASSY
3	1	D4986-1	CARGO HOOK LOCK
4	2	D4987-1	DUST SHIELD
5	1	D4988-1	KEEPERLESS ADAPTOR
6	1	D4989-1	LATCH SHAFT
7	1	D4990-041	ACTUATOR ASSEMBLY
8	1	D4991-1	LATCH ROLLER PIN
9	1	D4992-1	LATCH ROLLER
10	1	D4993-1	LATCH ROLLER DU BEARING
11	1	D4994-1	LATCH
12	2	D4995-1	ACTUATOR BUSHING
13	1	D4996-041	HOOK ASSEMBLY
14	1	D4997-1	LOAD BEAM BUMPER
15	2	D4998-1	LOCK BUMPER
16	1	D4999-1	CLOCK SPRING COVER
17	1	D5000-1	CLOCK SPRING
18	1	D5001-1	LOCK SPRING
19	2	D5002-1	LINK PIN
20	1	D5003-1	LINK
21	1	D5005-1	SOLENOID COVER GASKET
22	1	D5006-1	SOLENOID COVER
23	1	D5007-1	MANUAL RELEASE COVER
24	1	D5009-1	ACTUATOR SPRING
25	1	D5010-041	HOOK INTERFACE ASSY
26	1	D5011-041	HOOK SOLENOID ASSY
27	2	D5013-3	BUSHING
28	1	D5020-1	WIRE GUIDE/GRIP
29	1	D5044-1	DOWEL PIN
30	2	D5044-3	DOWEL PIN
31	2	D5045-1	SPLIT DU BEARING
32	1	D5056-1	HOOK PIN
33	2	D5057-1	NYLON WASHER
34	2	D5057-3	NYLON WASHER
35	1	D5065-1	HOOK MANUAL RELEASE LEVER
36	1	D5066-1	PLACARD
37	1	D5066-5	PLACARD

NOTES:

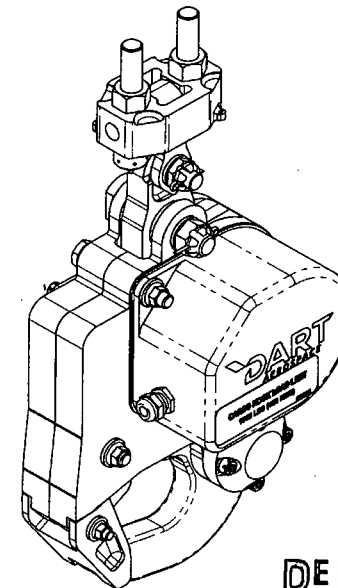
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 5.50 lbs

ITEM	QTY -041	P/N	DESCRIPTION
38	1	AN3C15A	BOLT
39	1	AN310C6	NUT, CASTELLATED
40	2	AN4C15A	BOLT
41	1	AN4C17A	BOLT
42	2	MS16624-4028	RETAINING RING
43	4	MS16624-5012-1	RETAINING RING
44	1	MS171532	SPRING PIN
45	3	MS21043-3	NUT, SELF-LOCKING
46	3	MS21043-4	NUT, SELF-LOCKING
47	1	MS24665-153	COTTER PIN
48	1	MS24694-C7	SCREW, CSK 100°
49	8	MS24674-9	SOCKET HEAD CAP SCREW
50	1	MS27039C0814	SCREW, PAN-HEAD
51	4	MS35338-137	LOCK WASHER
52	5	NAS1149C0363R	WASHER
53	6	NAS1149C0463R	WASHER
54	1	NAS1149C0663R	WASHER
55	1	NAS1149C0863R	WASHER



D4983-041 CARGO HOOK ASSY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 127023 MLC
14-12-04



RELEASED
R 2014-11-06

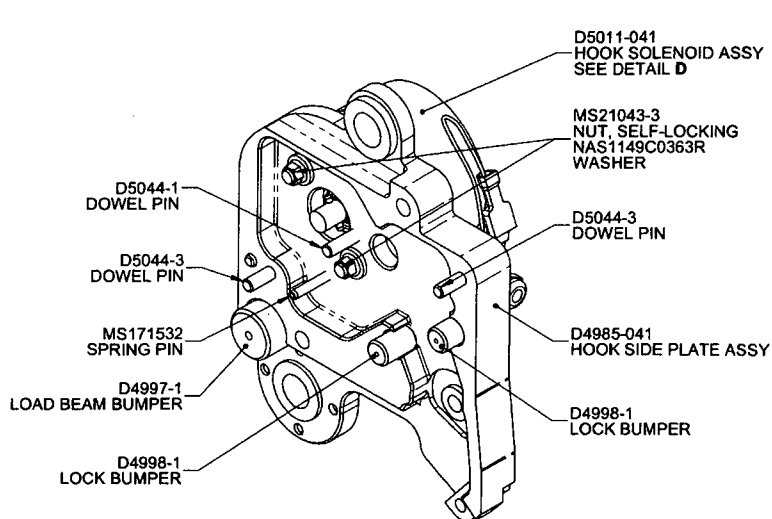
C	PICTORIAL UPDATE FOR CHANGES TO D5010-041 SUB ASSY. PICTORIAL UPDATE TO ITEM 28. ADDED ITEM 37 & 38. QTY FOR ITEM 44 WAS 4 (-8 DELETED). REDESIGNED D4985-041, D5007-1 AND D5065-1 AND UPDATED RELATED HARDWARE LENGTHS. ALL NASM HARDWARE REPLACED WITH AN/MS HARDWARE.	AJS	14.06.24
B	SHT 1 PARTS LIST: ITEM 42 WAS -151, ADDED ITEM 43, QTY FOR ITEM 44 WAS 8. ITEM 47 PART NUMBER WAS NAS1149C0832R. ITEM 51 PART NUMBER WAS NAS1149C0816R. ITEM 52 PART NUMBER WAS NASM24694-C4. REASON: DRAFTING ERROR.	AJS	14.03.13
A	NEW ISSUE	AJS	14.02.18
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED	AP		
MFG. APPR.	JLM		
APPROVED	MP		
DE APPR.	DS		
DATE	14.06.24		

APPROVED

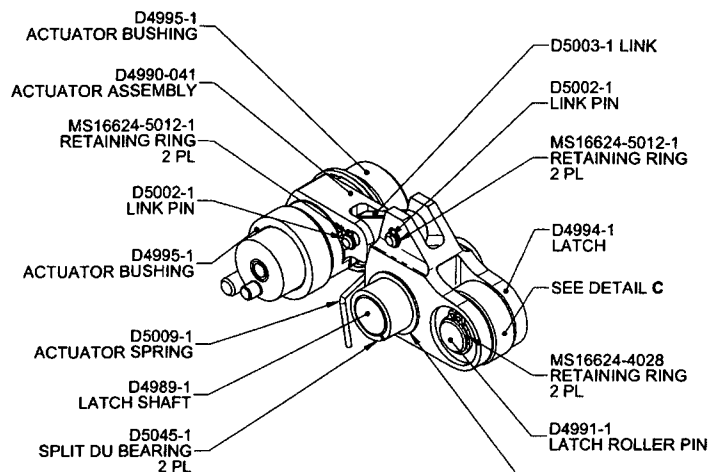
DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4983** REV. C
SHEET 1 OF 3
TITLE **CARGO HOOK ASSY** SCALE NTS

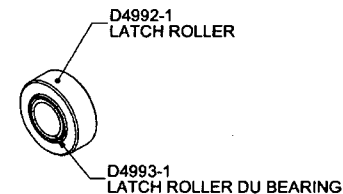
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BUILD SEQUENCE 1

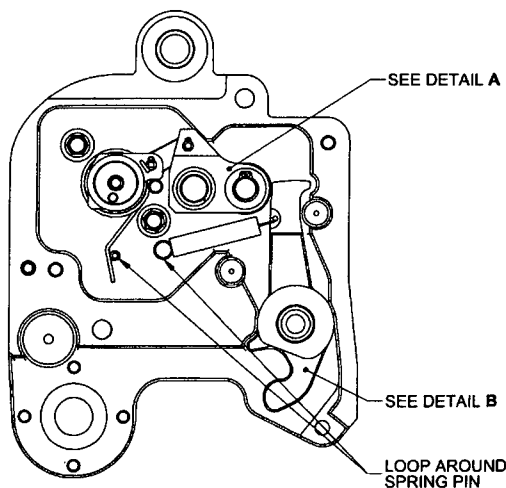


DETAIL A

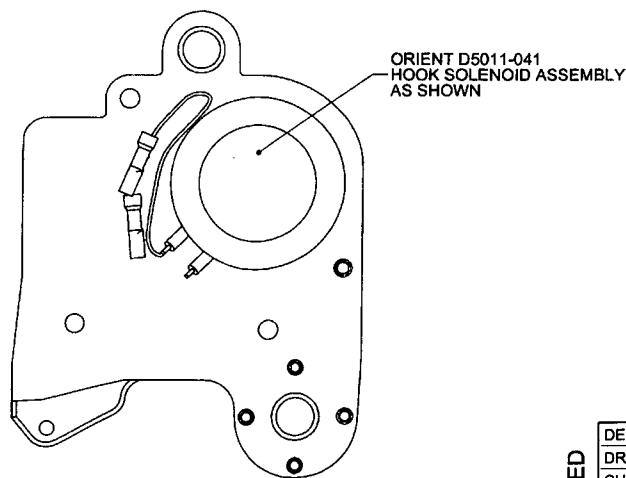


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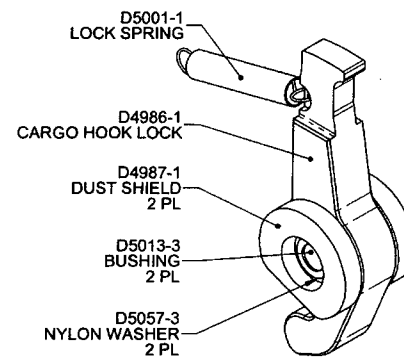
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R 2014 -11- 06



BUILD SEQUENCE 2

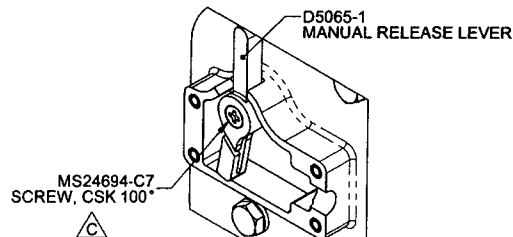


DETAIL D

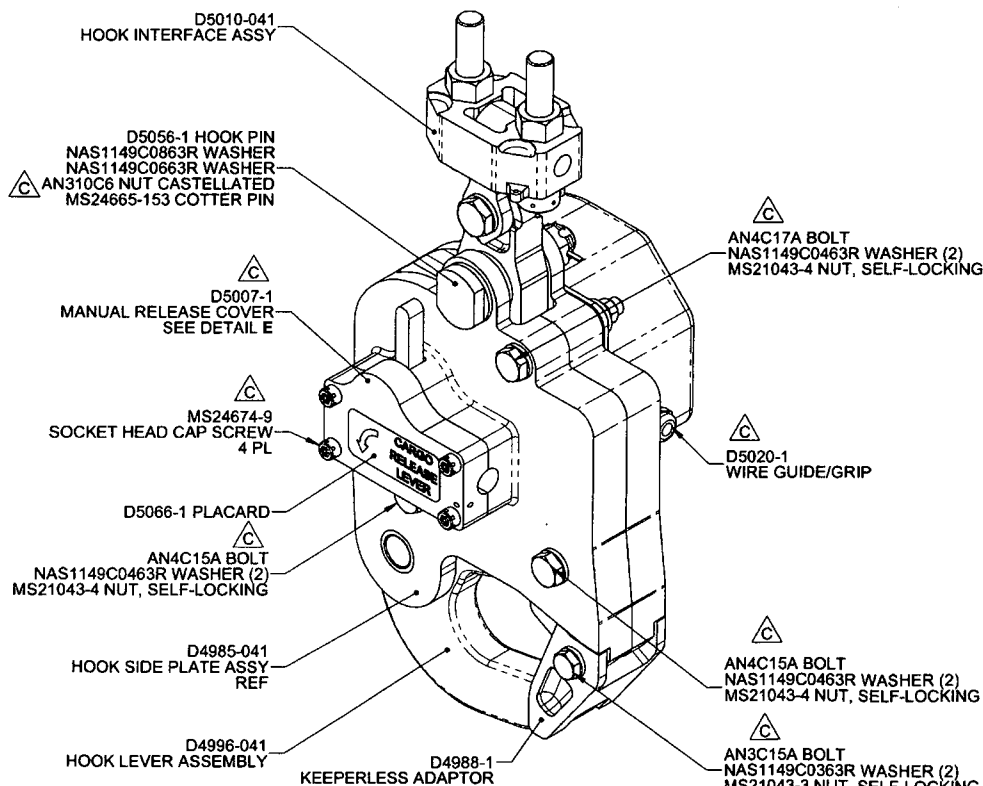


DETAIL B

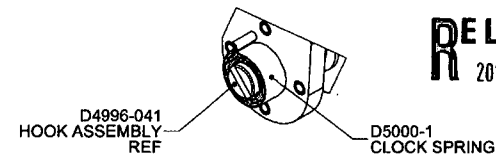
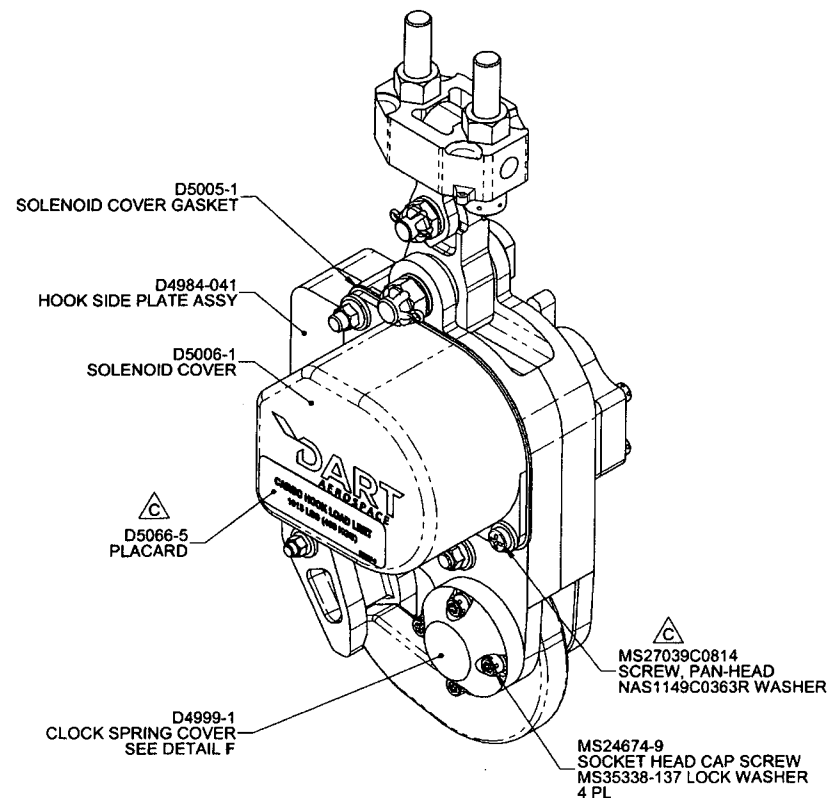
APPROVED	DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AJS		
	CHECKED	AP	DRAWING NO. D4983	REV. C
	MFG. APPR.	JLM	SHEET 2 OF 3	
	APPROVED	MP	SCALE	
	DE APPR.	DS	CARGO HOOK ASSY	
DATE 14.06.24			COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



DETAIL E



BUILD SEQUENCE 3



DETAIL F

APPROVED	DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
	DRAWN	AJS		
	CHECKED	AP	DRAWING NO.	REV. C
	MFG. APPR.	JLM	D4983	SHEET 3 OF 3
	APPROVED	MP	TITLE	SCALE
	DE APPR.	DS	CARGO HOOK ASSY	NTS
DATE		14.06.24	COPYRIGHT © 2014 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO26944**

Purchase Order Date 1/6/2015

PO Print Date 1/6/2015

Page Number 1 of 2

Order From :

VU-RED001

Ship To : DART AEROSPACE LTD

RED BARN MACHINE INC.
190 S DANEBO AVE.
EUGENE, OR 97402
USA

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 541-344-9953

Ship To Contact

Ship To Phone

Ship Via: FedEx Overnight collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

Destination-Collect

Line No	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
4	D4983-041P AS PER DWG D4983 REV. C B127023,B127024,B127025,B127026,B127027,B127028,B127029,B127030,B127031,B127032	Cargo Hook Assembly	1/23/2015 Yes 1/23/2015	FN	10.00 Each	\$6,048.00	\$60,480.00
						Line Total:	\$60,480.00
5	D5051-1P AS PER DWG D5051 REV. B B127035	Cyclic Switch Housing	1/23/2015 Yes 1/23/2015	FN	10.00 Each	\$186.00	\$1,860.00
						Line Total:	\$1,860.00
7	1401-45 PROCUREMENT QUALITY CLAUSES A034 INTER COMPANY SHIPPERS	PROCUREMENT QUALITY CLAUSES	1/23/2015 No 1/23/2015		1.00	\$0.00	\$0.00

Note:

1/6/2015



Pack Slip: 17940
17940

Packing Slip

Page: 1 of 1

Ship To:

DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY ONTARIO K6A 1K7
CANADA

Phone: 800-556-4166
Fax: 714-755-2995

Sold To:

CHANTAL CHARTRAND
DART AEROSPACE LTD.
1270 ABERDEEN STREET
HAWKESBURY ONTARIO K6A 1K7
CANADA

Phone: 800-556-4166
Fax: 613-632-4443
dkennedy@dartaero.com

Ship Date: 1/23/2015

Ship Via: FEDEX P1

F.O.B.: EUGENE, OR

Order: 16081

PO: 26944

Salesperson: ERIC BACON

FEDEX 325250593

PO

Line	Planned Qty	Shipped Qty	Part Number/Description	Rev
	10.00	10.00 <i>Pkg</i>	D4983-041P ✓	
	10.00	10.00 <i>Pkg</i>	CARGO HOOK ASSEMBLY D5051-1P	
			CYCLIC SWITCH HOUSING	

SP15-01-27

Dart Aerospace hereby certifies that all materials used in the manufacturing of our tools are new and meets all specifications called out in all applicable blueprints and drawings. All standard machining and manufacturing procedures are strictly followed.

[Signature]
Signed

Pack Slip: 8.03.01

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Mission
Ready.